EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	186	polyphenolic with protein	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/21 17:43
S2	69	polyphenolic with protein and bioadhesive	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/21 17:43
S3	50	polyphenolic with protein and bioadhesive and dopa	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/21 17:44
S4	24	polyphenolic with protein and bioadhesive and dopa and acidic	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/21 17:48
S5	36	polyphenolic with protein and bioadhesive and dopa and pH	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:28
S6	13	polyphenolic with protein and bioadhesive and dopa and (pH with "2.5" or pH with "3")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:29
S7	43	polyphenolic with protein and bioadhesive and dopa and composition	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:28
S8	15	polyphenolic with protein and bioadhesive and dopa and composition and 530/350.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:20
S9	3	polyphenolic with protein and bioadhesive and dopa and composition and 514/12.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:20
S10	0	polyphenolic with protein and bioadhesive and dopa and composition and 435/7.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:21
S11	0	polyphenolic with protein and bioadhesive and dopa and composition and 435/7.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:21

EAST Search History

S12	9	polyphenolic with protein and bioadhesive and dopa and composition and 435/69.1.ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:21
S13	36	polyphenolic and bioadhesive and dopa and pH	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:28
S14	13	polyphenolic and bioadhesive and dopa and (pH with "2.5" or pH with "3")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:44
S15	34	polyphenolic and dopa and (pH with "2.5" or pH with "3")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:44
S16	5	polyphenolic and dopa same (pH with "2.5" or pH with "3")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:46
S17	34	polyphenolic and dopa and (pH with "2.5" or pH with "3")	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/06/22 09:46

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 * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 09:26:59 ON 22 JUN 2006

=> index bioscience
FILE 'DRUGMONOG' ACCESS NOT AUTHORIZED
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.21       0.21

INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, ANTE, AQUALINE,
       AQUASCI, BIOENG, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA, CAPLUS,
       CEABA-VTB, CIN, CONFSCI, CROPB, CROPU, DDFB, DDFU, DGENE, DISSABS, DRUGB,
       DRUGMONOG2, DRUGU, EMBAL, EMBASE, ...' ENTERED AT 09:27:18 ON 22 JUN 2006

68 FILES IN THE FILE LIST IN STNINDEX

Enter SET DETAIL ON to see search term postings or to view
search error messages that display as 0* with SET DETAIL OFF.

=> polyphenolic with protein and bioadhesive and dopa
         1   FILE AQUASCI
  13 FILES SEARCHED...
         6   FILE CAPLUS
  22 FILES SEARCHED...
        20   FILE DGENE
  23 FILES SEARCHED...
  30 FILES SEARCHED...
         8   FILE IFIPAT
         1   FILE LIFESCI
  48 FILES SEARCHED...
         1   FILE PROMT
        38   FILE USPATFULL
  61 FILES SEARCHED...
         4   FILE USPAT2
         6   FILE WPIDS
  67 FILES SEARCHED...
         6   FILE WPINDEX

  10 FILES HAVE ONE OR MORE ANSWERS,   68 FILES SEARCHED IN STNINDEX

L1   QUE POLYPHENOLIC WITH PROTEIN AND BIOADHESIVE AND DOPA

=> d rank
F1          38   USPATFULL
F2          20   DGENE
F3           8   IFIPAT
F4           6   CAPLUS
F5           6   WPIDS
F6           6   WPINDEX
F7           4   USPAT2
F8           1   AQUASCI
F9           1   LIFESCI
F10          1   PROMT


=> file ifipat caplus wpids wpindex aquasci lifesci
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         7.93       8.14

FILE 'IFIPAT' ENTERED AT 09:35:13 ON 22 JUN 2006
COPYRIGHT (C) 2006 IFI CLAIMS(R) Patent Services (IFI)
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FILE 'CAPLUS' ENTERED AT 09:35:13 ON 22 JUN 2006
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FILE 'WPIDS' ENTERED AT 09:35:13 ON 22 JUN 2006
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FILE 'WPINDEX' ACCESS NOT AUTHORIZED

FILE 'AQUASCI' ENTERED AT 09:35:13 ON 22 JUN 2006
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FILE 'LIFESCI' ENTERED AT 09:35:13 ON 22 JUN 2006
COPYRIGHT (C) 2006 Cambridge Scientific Abstracts (CSA)

=> polyphenolic with protein and bioadhesive and dopa
L2 22 POLYPHENOLIC WITH PROTEIN AND BIOADHESIVE AND DOPA

=> dup remove l2
PROCESSING COMPLETED FOR L2
L3 18 DUP REMOVE L2 (4 DUPLICATES REMOVED)

=> d ti 1-18

L3 ANSWER 1 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Implantable medical device e.g. stents comprises coating of first layer containing **bioadhesive polyphenolic protein** derived from byssus-forming mussel, and further layer.

L3 ANSWER 2 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI METHOD FOR ATTACHING TWO SURFACES TO EACH OTHER USING A **BIOADHESIVE POLYPHENOLIC PROTEIN** AND PERIODATE IONS

L3 ANSWER 3 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI METHOD AND KIT PROVIDING **BIOADHESIVE** BINDING OR COATING WITH **POLYPHENOLIC** MUSSEL **PROTEINS**

L3 ANSWER 4 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Use of an acidic aqueous solution of a **bioadhesive polyphenolic protein** as an adhesive or coating

L3 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
TI Method and kit providing **bioadhesive** binding or coating with **polyphenolic** mussel **proteins**

L3 ANSWER 6 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI USE OF A **BIOADHESIVE** COMPOSITION COMPRISING A **POLYPHENOLIC PROTEIN**; A **BIOADHESIVE POLYPHENOLIC PROTEIN** DERIVED FROM A BYSSUS-FORMING MUSSEL, CONTAINING 3-15 AMINO ACID RESIDUES AND ATLEAST 5 TO 25% OF AMINO ACID RESIDUE OF **BIOADHESIVE POLYPHENOLIC PROTEIN** ARE **DOPA** (3,4 DIHYDROXY-L-PHENYLALANINE)

L3 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Method for attaching two surfaces to each other using a **bioadhesive polyphenolic protein** and periodate ions.

L3 ANSWER 8 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI **Bioadhesive** composition not containing enzymatic oxidizing agent or chemical cross-linking agent comprises **bioadhesive**

polyphenolic protein, a polymer, fine filaments, optionally a non-enzymatic oxidizing agent, and a filler protein.

L3 ANSWER 9 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI **BIOADHESIVES** FOR CELL AND TISSUE ADHESION; DECAPEPTIDES

L3 ANSWER 10 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI ADHESIVES DERIVED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; COATINGS, CROSSLINKING, WATER-IMPERVIOUS, UNDERWATER ADHESION, CORROSION RESISTANCE, PRIMERS, ORTHOPEDICS, DENTISTRY, ATTACHING TISSUE OR GRAFTS, SEALING WOUNDS, IMPLANTING PROSTHESIS OR MEDICAL DEVICE, ULTRAFILTRATION, PLANT TREATMENT

L3 ANSWER 11 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
TI Preparation of polymers containing dihydroxyphenylalanine and their adhesiveness

L3 ANSWER 12 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; ISOLATED FROM MUSSELS; ENZYMATICALLY DIGESTED

L3 ANSWER 13 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Water impermeable adhesive or coating compsn. - comprising bio adhesive poly phenolic protein component and crosslinking agent.

L3 ANSWER 14 OF 18 AQUASCI COPYRIGHT 2006 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 2
TI Marine **bioadhesives**: Projections in medicine and industry. PROGRAM OF THE FIRST INTERNATIONAL MARINE BIOTECHNOLOGY CONFERENCE (IMBC '89).

L3 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3
TI Method for making **DOPA**-containing **bioadhesive** proteins from tyrosine-containing proteins

L3 ANSWER 16 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; UNDERWATER ADHESION

L3 ANSWER 17 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Attachment of cells or tissue to substrate - using bio-adhesive deca-peptide polymer.

L3 ANSWER 18 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN DUPLICATE 4
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; UNDERWATER ADHESIVES

```
=> ab bib 18, 15, 14, 10, 9, 8, 7, 6, 5
L4            0 AB BIB 18, 15, 14, 10, 9, 8, 7, 6, 5

=> d ab bib 18, 15, 14, 10, 9, 8, 7, 6, 5
L4 HAS NO ANSWERS
'18 15 14 10 9 8 7 6 5 ' IS NOT A VALID SEARCH STATUS KEYWORD
Search status keywords:
NONE ---- Display only the number of postings.
STATUS -- Display statistics of the search.
ENTER SEARCH STATUS OPTION (NONE), STATUS, OR ?:none
L4             0 SEA AB BIB 18, 15, 14, 10, 9, 8, 7, 6, 5


=> dup remove l2
PROCESSING COMPLETED FOR L2
L5            18 DUP REMOVE L2 (4 DUPLICATES REMOVED)
```

=> d ti 1-18

L5 ANSWER 1 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
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L5 ANSWER 12 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; ISOLATED FROM MUSSELS; ENZYMATICALLY DIGESTED

L5 ANSWER 13 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Water impermeable adhesive or coating compsn. - comprising bio adhesive

poly phenolic protein component and crosslinking agent.

L5 ANSWER 14 OF 18 AQUASCI COPYRIGHT 2006 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 2
TI Marine **bioadhesives**: Projections in medicine and industry. PROGRAM OF THE FIRST INTERNATIONAL MARINE BIOTECHNOLOGY CONFERENCE (IMBC '89).

L5 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3
TI Method for making **DOPA**-containing **bioadhesive** proteins from tyrosine-containing proteins

L5 ANSWER 16 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; UNDERWATER ADHESION

L5 ANSWER 17 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
TI Attachment of cells or tissue to substrate - using bio-adhesive deca-peptide polymer.

L5 ANSWER 18 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN DUPLICATE 4
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; UNDERWATER ADHESIVES

=> d ab bib 18, 15, 14, 10, 9, 8, 7, 6, 5

L5 ANSWER 18 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN DUPLICATE 4
AB Methods are described for the preparation and isolation of novel decapeptides of the formula:

```
ALA      LYS                          PRO/HYP
1,5-PYRROLIDINYLENE)-CO-HN-HC(-HC(-R)-OH)-CO-HN-
SER/THR
HC(-H2C-((3-X-1,4-PHENYLENE)-OH)-CO-(3,4-DI(X-)-
TYR/DOPA                                PRO/HYP
1,5-PYRROLIDINYLENE)-CO-HN-HC(-HC(-R)-OH)-CO-
-CO-(3,4-DI(X-)-1,5-PYRROLIDINYLENE)-CO-HN-
PRO/HYP                                  SER/THR
HC(-CH(-R)-OH)-CO-
NH-HC(-H2C-((3-X-1,4-PHENYLENE)-OH)-CO-HN-HC(-
TYR/DOPA
(H2C)4-NH2)-COOH
LYS
```

wherein each X is independently selected from the group comprising hydroxyl and hydrogen, wherein each R is independently selected from the group comprising hydrogen and methyl, from **bioadhesive polyphenolic proteins** which comprise:

```
H2N-(HC(-CH3)-CO-HN-HC(-(H2C)4-NH2)-CO-(3-X,4-(X=)-
ALA      LYS                          PRO/HYP
1,5-PYRROLIDINYLENE)-CO-HN-HC(-HC(-R)-OH)-CO-HN-
SER/THR
HC(-H2C-((3-X-1,4-PHENYLENE)-OH)-CO-(3,4-DI(X-)
TYR/DOPA                                  PRO/HYP
1,5-PYRROLIDINYLENE)-CO-(3,4-DI(X-)-1,5-PYRROLIDIN-
PRO/HYP
YLENE)-CO-HN-HC(-HC(-R)-OH)-CO-HN-HC(-H2C-((3-X,
SER/THR                        TYR/DOPA
1,4-PHENYLENE)-OH)-CO-HN-HC(-(H2C)4-NH2))N-COOH
LYS
```

wherein n is a whole number from about 60 to about 100, wherein each X

is independently selected from the group comprising hydroxyl and hydrogen, and wherein each R is independently selected from the group comprising hydrogen and methyl. Such decapeptides may be used to construct large polyphenolic molecules comprising from about 1 to about 1000 decapeptide repeating units and wherein the linking group is selected from the group comprising amino acid, oligopeptide and bifunctional spacer.

AN 01669421 IFIPAT;IFIUDB;IFICDB
TI DECAPEPTIDES PRODUCED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; UNDERWATER ADHESIVES
INF Waite, J Herbert, Collinsville, CT
IN WAITE J HERBERT
PAF University of Connecticut Research & Development Corporation, Farmington, CT
PA CONNECTICUT, UNIVERSITY OF RESEARCH & DEVELOPMENT CORP (14223)
EXNAM Phillips, Delbert R
AG Jones, Day, Reavis & Pogue
PI US 4585585 A 19860429 (CITED IN 024 LATER PATENTS)
AI US 1984-587132 19840307
XPD 7 Mar 2004
FI US 4585585 19860429
DT Utility; REASSIGNED; CERTIFICATE OF CORRECTION
CDAT 29 Jul 1986
FS CHEMICAL
GRANTED
OS CA 105:44415
MRN 004475 MFN: 0519
004475 0522
006082 0497
006085 0202
006182 0293
CLMN 3

L5 ANSWER 15 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3
AB **Bioadhesive polyphenolic proteins** containing **DOPA** residues are formed from protein precursors containing tyrosine residues by preparing a tyrosine-containing protein and reacting it with a tyrosinase enzyme at pH .apprx.4.5-8 and .apprx.20-37° at an enzyme-to-protein ratio of .apprx.5-50 units enzyme/μg protein. Ascorbic acid can be added to retard conversion of **DOPA** residues to quinones. **Bioadhesive** bond strength and rate of tyrosine to **DOPA** conversion can be manipulated by any variable (e.g., pH, temperature, and use of oxidation and reduction agents) which affects the rate of enzyme reaction.
AN 1988:73840 CAPLUS
DN 108:73840
TI Method for making **DOPA**-containing **bioadhesive** proteins from tyrosine-containing proteins
IN Benedict, Christine V.; Picciano, Paul T.
PA Bio-Polymers, Inc., USA
SO Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI EP 242656	A2	19871028	EP 1987-104853	19870402
EP 242656	A3	19890419		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
DK 8701639	A	19871026	DK 1987-1639	19870331
FI 8701726	A	19871026	FI 1987-1726	19870421
NO 8701664	A	19871026	NO 1987-1664	19870422

	AU 8771887	A1	19871029	AU 1987-71887	19870423
	AU 597353	B2	19900531		
	JP 63028399	A2	19880206	JP 1987-100208	19870424
PRAI	US 1986-856594	A	19860425		

L5 ANSWER 14 OF 18 AQUASCI COPYRIGHT 2006 FAO (On behalf of the ASFA Advisory Board). All rights reserved. on STN DUPLICATE 2

AB The phenol gland in the mussel foot (genus Mytilus) synthesizes a **polyphenolic protein** (PPP) which contains 3,4-dihydroxyphenyl-L-alanine (**DOPA**). The PPPs are strong water-resistant adhesives. The Chilean mussel Aulacomya ater contains a PPP with a repetitive consensus sequence, which is different to the decapeptide of Mytilus edulis (J.H. Waite, U.S. Patent Number 4,585,585). Also, the PPP of Choromytilus chorus and Perumytilus purpuratus were studied. Adhesion of these proteins to glass, slate, ceramic and plastics depends on the concentration of the PPP, of the Ph, ionic strength, temperature and DTT or 2-mercaptoethanol. The construction of a small bioreactor with the beta -galactosidase immobilized to glass was studied.

AN 89:10302 AQUASCI

DN ASFA1 1990 20-11433

TI Marine **bioadhesives**: Projections in medicine and industry. PROGRAM OF THE FIRST INTERNATIONAL MARINE BIOTECHNOLOGY CONFERENCE (IMBC '89).

AU Burzio, L.O.; Fuente, E. de la; Gutierrez, E.; Saez, C.; Brito, M.; Burzio, L.A.; Burzio, V.A.; Weiss, R.; Pardo, J.

CS Inst. Biochem., Univ. Austral Chile, Baldivia, Chile; Japanese Soc. for Marine Biotechnology, Tokyo (Japan); Foundation for Advancement of International Science; ICSU Int. Scientific Comm. for Biotechnology

SO (1989) p. 73. Summary only..
Meeting Info.: 1. Int. Marine Biotechnology Conf. (IMBC '89). Tokyo (Japan). 4-6 Sep 1989.

DT Book

TC Conference; Abstract

FS ASFA1

SL English

L5 ANSWER 10 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN

AB An adhesive or coating formulation useful in biomedical application and particularly well suited for use in aqueous environments is provided comprising: (1) a **bioadhesive polyphenolic protein** component having from about 5 to about 99 weight percent of a proteinaceous substance comprising from about 10 to about 400 of the following repeating decapeptide unit:

D R A W I N G

in which each X is hydrogen or hydroxyl and each R is hydrogen or methyl; (2) from about 1.0 to about 40 weight percent of a crosslinking agent which promotes cross-linking of the decapeptide; (3) one or more additives which promote the desired properties of the formulation, said additives comprising at least one surfactant and being present in an amount of from 0% to about 90% by weight, and (4) a filler compatible with the intended use of the formulation, said filler being present in an amount of from 0% to about 50% by weight.

AN 02145166 IFIPAT;IFIUDB;IFICDB

TI ADHESIVES DERIVED FROM **BIOADHESIVE POLYPHENOLIC PROTEINS**; COATINGS, CROSSLINKING, WATER-IMPERVIOUS, UNDERWATER ADHESION, CORROSION RESISTANCE, PRIMERS, ORTHOPEDICS, DENTISTRY, ATTACHING TISSUE OR GRAFTS, SEALING WOUNDS, IMPLANTING PROSTHESIS OR MEDICAL DEVICE, ULTRAFILTRATION, PLANT TREATMENT

INF Benedict, Christine V, Farmington, CT
Picciano, Paul T, Canton, CT

IN Benedict Christine V; Picciano Paul T

PAF Bio-Polymers, Inc, Plainville, CT

PA BioPolymers Inc (22717)
EXNAM Nutter, Nathan M
AG Kramer, Brufsky & Cifelli
PI US 5015677 A 19910514 (CITED IN 026 LATER PATENTS)
AI US 1988-213439 19880627
XPD 14 May 2008
RLI US 1986-856597 19860425 CONTINUATION-IN-PART ABANDONED
US 1987-34078 19870402 CONTINUATION-IN-PART ABANDONED
FI US 5015677 19910514
DT Utility; REASSIGNED
FS CHEMICAL
GRANTED
OS CA 115:142382
MRN 004935 MFN: 0484
006190 0504
CLMN 34

L5 ANSWER 9 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
AB A cell culturing system, methods for the preparation thereof, and methods for affixing other biologically active moieties to a substrate are provided. Said cell culturing system comprises: a substrate; a coating thereon of a sterile formulation comprising **polyphenolic protein** containing from about 35 to 100% by weight pure **bioadhesive polyphenolic protein** having the repeating decapeptide unit:

D R A W I N G

wherein N is a whole number ranging from about 10 to about 100, wherein each X is independently selected from the group consisting of hydroxyl and hydrogen, and wherein each R is independently selected from the group consisting of hydrogen and methyl; viable cells affixed to said coated substrate; and a nutritive medium contacting said cells, whereby said cells perform normal metabolic cell functions.
AN 02247733 IFIPAT;IFIUDB;IFICDB
TI **BIOADHESIVES** FOR CELL AND TISSUE ADHESION; DECAPEPTIDES
INF Benedict, Christine V, Farmington, CT
Picciano, Paul T, Canton, CT
IN Benedict Christine V; Picciano Paul T
PAF Collaborative Research, Inc, Bedford, MA
PA Genome Therapeutics Corp (38195)
EXNAM Weimar, Elizabeth C
EXNAM Poulos, Gail
AG Wolf, Greenfield & Sacks
PI US 5108923 A 19920428 (CITED IN 005 LATER PATENTS)
AI US 1987-34801 19870403
XPD 28 Apr 2009
RLI US 1986-856687 19860425 CONTINUATION-IN-PART ABANDONED
FI US 5108923 19920428
DT Utility
FS CHEMICAL
GRANTED
MRN 005925 MFN: 0350
006002 0226
CLMN 24
GI 3 Drawing Sheet(s), 5 Figure(s).

L5 ANSWER 8 OF 18 WPIDS COPYRIGHT 2006 THE THOMSON CORP on STN
AB WO 200144401 A UPAB: 20010919
NOVELTY - **Bioadhesive** composition (I) comprises a **bioadhesive polyphenolic protein** comprising 30-3000 amino acids, comprises tandemly linked peptide repeats of 3-15 amino acid residues; (ii) a polymer comprising carbohydrates; (iii) fine filaments; (iv) optionally a non-enzymatic oxidizing agent; and (v) a

filler protein. (I) does not contain an enzymatic oxidizing agent or chemical cross-linking agent.

DETAILED DESCRIPTION - **Bioadhesive** composition comprises:

(i) a **bioadhesive polyphenolic protein** derived from a byssus-forming mussel comprising 30-3000 amino acids consisting tandemly linked peptide repeats of 3-15 amino acid residues, at least 5% and preferably 6-25% are at least 5 % and preferably 6-25 % has 3,4 dihydroxy-L-phenylalanine (**DOPA**);

(ii) a polymer comprising carbohydrate groups such as heparin, chondroitin sulfate, chitosan and hyaluronan;

(iii) fine filaments;

(iv) optionally a non-enzymatic oxidizing agent such as hydrogen peroxide, nitroprusside ions or periodate ions; and

(v) a filler protein, such as collagen, albumin, casein, elastin, fibronectin or fibrin.

(I) does not contain an enzymatic oxidizing agent or chemical cross-linking agent.

An INDEPENDENT CLAIM is also included for:

(1) a **bioadhesive** composition (II) with a composition as (I) which does not comprise any enzymatic oxidizing agent or chemical cross-linking agent, for medical use; and

(2) a composition (III) comprising (i) and (ii), and does not comprise any enzymatic oxidizing agent or chemical cross-linking agent.

ACTIVITY - Ophthalmological.

No specific biological data given.

MECHANISM OF ACTION - None given.

USE - For medical use, for preparing an ophthalmic adhesive to heal perforations, lacerations or incisions, to reattach the retina to the back of the eye, to repair and attach lenses and to repair, construct, reconstruct and/or attach corneal component parts. For treating complications adnexa to the eye, such as facial skin and mucous membranes including eye lids and the conjunctiva, tear channel system, other periocular structures and the orbit (all claimed).

ADVANTAGE - The composition is non-irritating, non-allergenic and nontoxic. The composition does not contain any enzyme or chemical cross-linking agent.

Dwg.0/0

AN 2001-488556 [53] WPIDS

DNN N2001-361511 DNC C2001-146597

TI **Bioadhesive** composition not containing enzymatic oxidizing agent or chemical cross-linking agent comprises **bioadhesive polyphenolic protein**, a polymer, fine filaments, optionally a non-enzymatic oxidizing agent, and a filler protein.

DC B04 D22 G03 P34

IN HANSSON, A; QVIST, M; HANSSON, H A; HANSSON, H

PA (QVIS-I) QVIST M; (HANS-I) HANSSON H A; (BIOP-N) BIOPOLYMER PROD SWEDEN AB

CYC 95

PI WO 2001044401 A1 20010621 (200153)* EN 21

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

SE 9904650 A 20010618 (200153)

AU 2001024172 A 20010625 (200162)

SE 516266 C2 20011210 (200205)

EP 1265971 A1 20021218 (200301) EN

R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR

US 2003065060 A1 20030403 (200325)

US 6867188 B2 20050315 (200520)

US 2005148050 A1 20050707 (200547)

EP 1589088 A1 20051026 (200570) EN

R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
EP 1265971 B1 20060426 (200629) EN
R: AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
DE 60027606 E 20060601 (200638)
ADT WO 2001044401 A1 WO 2000-SE2533 20001214; SE 9904650 A SE 1999-4650 19991217; AU 2001024172 A AU 2001-24172 20001214; SE 516266 C2 SE 1999-4650 19991217; EP 1265971 A1 EP 2000-987904 20001214, WO 2000-SE2533 20001214; US 2003065060 A1 WO 2000-SE2533 20001214, US 2002-168093 20021015; US 6867188 B2 Provisional US 2000-178548P 20000126, WO 2000-SE2533 20001214, US 2002-168093 20021015; US 2005148050 A1 Provisional US 2000-178548P 20000126, Cont of WO 2000-SE2533 20001214, Cont of US 2002-168093 20021015, US 2005-73684 20050308; EP 1589088 A1 Div ex EP 2000-987904 20001214, EP 2005-104976 20001214; EP 1265971 B1 EP 2000-987904 20001214, WO 2000-SE2533 20001214, Related to EP 2005-104976 20050608; DE 60027606 E DE 2000-00027606 20001214, EP 2000-987904 20001214, WO 2000-SE2533 20001214
FDT AU 2001024172 A Based on WO 2001044401; EP 1265971 A1 Based on WO 2001044401; US 6867188 B2 Based on WO 2001044401; US 2005148050 A1 Cont of US 6867188; EP 1589088 A1 Div ex EP 1265971; EP 1265971 B1 Related to EP 1589088, Based on WO 2001044401; DE 60027606 E Based on EP 1265971, Based on WO 2001044401
PRAI SE 2000-799 20000310; SE 1999-4650 19991217;
US 2000-178548P 20000126

L5 ANSWER 7 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN
AB The invention can be provided as a kit of parts comprising the MAP-solution, a preparation comprising the periodate ions and optionally a device to apply the compns. of the invention to surfaces that are to be attached to each other or coated. Thus, a composition containing MAP proteins 20 mg/mL, and NaIO4
6% had an adhesive strength of 90 g.
AN 2003:777643 CAPLUS
DN 139:281323
TI Method for attaching two surfaces to each other using a **bioadhesive polyphenolic protein** and periodate ions.
IN Qvist, Magnus
PA Swed.
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003080137	A1	20031002	WO 2003-SE492	20030325
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003216019	A1	20031008	AU 2003-216019	20030325
	EP 1490122	A1	20041229	EP 2003-745063	20030325
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2005224175	A1	20051013	US 2004-509401	20040924
PRAI	SE 2002-924	A	20020326		
	US 2002-374129P	P	20020422		
	WO 2003-SE492	W	20030325		

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 6 OF 18 IFIPAT COPYRIGHT 2006 IFI on STN
AB A non-irritating, non-allergenic and non-toxic **bioadhesive** composition can be obtained by providing a **bioadhesive** composition comprising a) a **polyphenolic protein** derived from byssus-forming mussels b) a polymer comprising carbohydrate groups. The **bioadhesive** composition does not contain any enzyme or chemical cross-linking agent. Optionally, the composition may contain an oxidising agent and/or a filler protein. Preferably, the composition is provided as a kit of at least two parts, namely the **polyphenolic protein** and the polymer comprising carbohydrate groups, respectively. The composition is especially suitable as an adhesive in ophthalmic therapy.
AN 10320646 IFIPAT;IFIUDB;IFICDB
TI USE OF A **BIOADHESIVE** COMPOSITION COMPRISING A **POLYPHENOLIC PROTEIN**; A **BIOADHESIVE POLYPHENOLIC PROTEIN** DERIVED FROM A BYSSUS-FORMING MUSSEL, CONTAINING 3-15 AMINO ACID RESIDUES AND ATLEAST 5 TO 25% OF AMINO ACID RESIDUE OF **BIOADHESIVE POLYPHENOLIC PROTEIN** ARE **DOPA** (3,4 DIHYDROXY-L-PHENYLALANINE)
INF Hansson; Hans Arrie, Hovas, SE
Qvist; Magnus, Alingese, SE
IN Hansson Hans Arrie (SE); Qvist Magnus (SE)
PAF Unassigned
PA Unassigned Or Assigned To Individual (68000)
PPA Biopolymer Products of Sweden AB SE (Probable)
AG YOUNG & THOMPSON, 745 SOUTH 23RD STREET 2ND FLOOR, ARLINGTON, VA, 22202
PI US 2003065060 A1 20030403
AI US 2002-168093 20021015
WO 2000-SE2533 20001214
20021015 PCT 371 date
20021015 PCT 102(e) date
PRAI SE 1999-4650 19991217
SE 2000-799 20000310
FI US 2003065060 20030403
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
CLMN 9

L5 ANSWER 5 OF 18 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
AB The present invention pertains to a method for attaching two surfaces to each other or coating a surface, comprising the steps of providing a **bioadhesive** composition consisting of a **bioadhesive polyphenolic protein** derived from a byssus-forming mussel, mixing the **bioadhesive** protein with a strongly alkaline solution before or simultaneously while applying the composition to the surfaces which are to be attached to each other or the surface to be coated. The surfaces are then joined and left for a sufficiently long time to allow curing to occur; alternatively the surface coated by the composition is left for a sufficiently long time to allow curing to occur. The invention can be provided as a kit of parts comprising the **bioadhesive** protein solution and a preparation of a strongly alkaline solution
AN 2003:491084 CAPLUS
DN 139:58008
TI Method and kit providing **bioadhesive** binding or coating with **polyphenolic** mussel **proteins**
IN Qvist, Magnus
PA Swed.
SO PCT Int. Appl., 22 pp.
CODEN: PIXXD2

DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003051418	A1	20030626	WO 2002-SE2321	20021213
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2002358381	A1	20030630	AU 2002-358381	20021213
	EP 1453553	A1	20040908	EP 2002-792145	20021213
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	US 2005016676	A1	20050127	US 2004-498793	20040614
PRAI	SE 2001-4227	A	20011214		
	US 2002-354478P	P	20020208		
	WO 2002-SE2321	W	20021213		

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT